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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,818	04/26/2005	Christophe Labreuche	4590-395	9375

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EXAMINER	
BROWN JR, NATHAN H	

ART UNIT	PAPER NUMBER
2129	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/532,818	LABREUCHE, CHRISTOPHE	
	Examiner	Art Unit	
	NATHAN H. BROWN JR	2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *(3)* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Examiner's Detailed Office Action

1. This Office Action is responsive to the communication for application 10/532,818, filed June 26, 2008.

2. Claims 1-19 are pending. Claims 1 and 19 are currently amended. Claims 2-18 are previously presented.

3. After the previous office action, claims 1-19 stood rejected.

Claim Objections

4. Claim 19 is objected to because of the following informalities: "A theorem proving decision support system, the method comprising" should be --A theorem proving decision support system, the method of which, comprising--. Appropriate correction is required.

Claim Rejections - 35 USC § 112, 1st

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Amended independent claim 1 recites a "method of providing a decision result to a user decision...the method executing on a computer". Examiner finds no disclosure of a computer, processors memory, computer readable media, or storage media in the specification as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 2-18 merely provide the technical details of

the algorithm described in claim 1 and do not cure the deficiency of claim 1. Therefore, claims 1-18 are considered non-statutory under 35 U.S.C. 112, first paragraph.

7. Claim 19 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Amended independent claim 19 recites a "theorem proving decision support system the method comprising the steps of: establishing on a computer system decision making rules…". Examiner finds no disclosure of a computer, processors, memory, computer readable media, or storage media in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Therefore, claim 19 is considered non-statutory under 35 U.S.C. 112, first paragraph.

8. Claims 1-18 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Amended independent claim 1 recites a "method of providing a decision result to a user decision...the method executing on a computer". Examiner finds no disclosure of a computer, processors, memory, computer readable media, or storage media in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 2-18 merely provide the technical details of the algorithm described in claim 1 and do not cure the deficiency of claim 1. Therefore, claims 1-18 are considered non-statutory under 35 U.S.C. 112, first paragraph.

9. Claim 19 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Amended independent claim 19

recites a "theorem proving decision support system the method comprising the steps of: establishing on a computer system decision making rules…". Examiner finds no disclosure of a computer, processors, memory, computer readable media, or storage media in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Therefore, claim 19 is considered non-statutory under 35 U.S.C. 112, first paragraph.

10. Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph. Specifically, if the application fails as a matter of fact to satisfy 35 U.S.C. § 101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. § 112.; In re Kirk, 376 F.2d 936, 942, 153 USPQ 48, 53 (CCPA 1967) MPEP 2107.01 (IV).

Claim Rejections - 35 USC § 101

11. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

12. Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter: abstraction, algorithm, and/or software per se. Amended independent claim 1 recites a "method of providing a decision result to a user decision...the method executing on a computer". As Examiner finds no definition of "computer" in terms of processors, memory, computer readable media, or storage media; Examiner considers the term "computer" to mean a basic abstract symbol-manipulating devices like a Turing Machine (see http://en.wikipedia.org/wiki/Turing_machine). The remainder of claim 1 recites only the judicial exceptions of mathematical abstraction and algorithm. Claims 2-18 merely provide the technical details of the algorithm described in claim 1 and do not cure the deficiency of claim 1. Therefore, claims 1-18 are considered non-statutory under 35 U.S.C. 101.

13. Claim 19 is rejected under 35 U.S.C. 101 for the same reason as claim 1.

Response to Arguments

14. Applicant's arguments filed June 26, 2008 have been fully considered but they are not persuasive.

Rejection of Claims 1-19 Under 35 U.S.C. §101

Applicant argues:

> Regarding the rejections of claims 1-19 under 35 U.S.C. §101, claims 1 and 19 are amended and are believed to be patentable over the applied art for the reasons discussed below.
>
> As amended, independent claims 1 and 19 recite a computer system executing a method that generates questions answerable by an expert, the system introducing compensation rules in a decision tree that originally has no compensation rules, fuzzifying the compensation rules, deducing the values of a set of rules used to determine a decision; and outputs the decision result to a user. Support for these amendments can be found at the paragraph beginning at least page 15, line 34, that describes a real world application of the recited decision making process to determine the passing or failing of a student based upon two examinations.

Examiner responds:

> Examiner finds no disclosure of a computer or processors, memory, computer readable media, or storage media by which

a computer system would be constructed. Therefore, claims 1-19 remain rejected under 35 U.S.C. §101.

Applicant argues:

> Applicant respectfully submits that the use of a computer system to host the claimed method would be obvious to one of ordinary skill in the art of decision making processes, especially expert systems based at least partially on fuzzy logic. Such a method is neither an abstraction, nor an algorithm, nor software, per se, requiring both input and output interfaces for communicating with a user.

Examiner responds:

Examiner disagrees. The use of a computer system is not necessary to describe the claimed method as the claimed method is considered clearly directed toward the presentation of the theoretical results, comprising the majority of the specification (see pp. 16-68), in an algorithmic fashion.

Applicant argues:

> Applicant therefore submits that because claims 1 and 19 recite a practical application wherein a physical transformation transforms inputted data to a decision result presented to a user, the rejection of claims 1-19 under 35 U.S.C. §101 is overcome.

Examiner responds:

Examiner disagrees.

First, the final result of "outputting a decision result to a user" merely recites outputting an abstract result as the decision refers to no specific or substantial entity or problem in a real-world domain. On the other hand, the final result could, *in the abstract*, refer to *any* entity or problem domain in the real-world, in which case, the doctrine of preemption is violated.

Second, data is symbolic (or comprised of symbols), which is not physical (*see* http://en.wikipedia.org/wiki/Symbol). Therefore, the transformation of data is not a physical transformation. The physical substrate or object *carrying* data—a symbolate—(e.g., the pits on an optical disk) is *not* transformed, where as the symbols it *represents* are (e.g., in the process of becoming music or video). Neither can the electrons flowing in circuitry designed to compute music or video from optical disk memory be said to be transformed, as the mere routing of current does not physically (quantum mechanically) transform the electrons comprising it. Nor is the circuitry which routes the current to compute music or video from optical disk memory transformed, as its fixed

arrangement of components is exactly that which represents the mathematical functions required to transform optical data to sight and sound. The only things temporarily transformed are the "states" (*see* http://en.wikipedia.org/wiki/State_(computer_science) or http://en.wikipedia.org/wiki/State_(physics)) of the device components during computation, and these *states* are mathematical concepts used in describing the physical behavior of device components. At the end of the computation, the device and its components revert back to their original states in order to be reused.

The rejection of claims 1-19 under 35 U.S.C. §101 is not considered to be overcome.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan H. Brown, Jr. whose telephone number is 571-272- 8632. The examiner can normally be reached on M-F 0830-1700. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Vincent can be reached on 571-272-

3080. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nathan H. Brown, Jr.
September 9, 2008

/David R Vincent/
Supervisory Patent Examiner, Art Unit 2129